



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------|------------------------|
| 10/604,760 | 08/14/2003 | Jan Lundgren | 7589.049.NPUS01 | 1759 |
| 65858 7590 01/28/2008 NOVAK DRUCE AND QUIGG LLP (Volvo) 1000 LOUISIANA STREET FIFTY-THIRD FLOOR HOUSTON, TX 77002 | | | EXAMINER HONG, JOHN C | |
| | | | ART UNIT 3726 | PAPER NUMBER |
| | | | MAIL DATE 01/28/2008 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-----------------|---------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/604,760 | LUNDGREN, JAN | |
| | Examiner | Art Unit | |
| | JOHN C. HONG | 3726 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,9-14,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,9-14,17,18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/27/07 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1-3, 5, 9, 11, 13, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Farone et al. (U.S. Patent 4868365).

Farone et al. disclose : Regarding Claim(s) 1, a method for manufacturing a generally ring-shaped stator or rotor component which is intended during operation to conduct a gas flow, comprising: constructing a portion of said stator or rotor component by steps including providing a curved first wall part (34) having one edge bearing against a flat side of a second wall part (30) extending in the intended that extends in a direction corresponding to an eventual radial direction of the component in such a way that the first wall part extends and curves in the intended a direction corresponding to an eventual circumferential direction of the component and also extends in a direction corresponding to an eventual axial direction of the component; laser-welding (94) the edge (84) of the first wall part is then laser welded to the second wall part from

an, in the circumferential direction, opposite side of the second wall part in relation to the first wall part in such a way that the joined-together portions of the wall parts form a T-shaped joint (Fig. 4); wherein a sufficient number of stator or rotor component portions are so constructed and are mutually arranged so as to form the stator or rotor component, with the curved first wall parts of the stator or rotor components defining an axially extending, substantially annular flow guiding surface that delimits a gas duct in the eventual radial direction (Fig. 4).

Regarding Claim(s) 2, the first wall part (34) of said stator or rotor component portion abuts the flat side of the second wall part (30) in generally perpendicular fashion.

Regarding Claim(s) 3, the second wall part (30) of said stator or rotor component portion is arranged such that it also extends in the intended axial direction corresponding to the eventual axial direction of the component.

Regarding Claim(s) 5, the second wall part (30), extending in the direction corresponding to the eventual radial direction of the stator or rotor component, is arranged so as to circumferentially limit the gas duct (between walls 34) in the direction corresponding to the eventual circumferential direction of the component.

Regarding Claim(s) 6, the second wall part (30) is arranged such that it has an essentially radial widening for guidance of the gas flow and/or transmission of load during operation of the component.

Regarding Claim(s) 9, the first wall part (34) is placed with a second edge, which is opposite to the first-named edge, bearing against the flat side of a further second wall part (35), which is arranged at a distance in the circumferential direction from the first-named second wall part (30), and is connected thereto.

Regarding Claim(s) 11, the two second wall parts (30,35) which are spaced apart in the circumferential direction constitute at least part of two different blades or stays for guidance of a gas flow and/or transmission of load.

Regarding Claim(s) 13, the first and second wall part are arranged between an, in the radial direction, inner and outer ring element (35,32) .

Regarding Claim(s) 17, the stator or rotor component is **intended for** a gas turbine.

Regarding Claim(s) 18, the stator or rotor component is **intended for** a jet engine.

4. Claims 1,10,11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Havard et al. (U.S. Patent 483034).

Havard et al. teach in figure 1, placing a first wall part 2 with an edge thereof bearing against the flat side of a second wall part 1 and thereby extending in the intended radial direction of the component in such a way that the first wall part 2 extends in the intended circumferential direction ("intended circumferential direction" with respect to the location 4) of the component in such a way that the first wall part 2 extends in the intended circumferential direction of the component, and laser-welding (col. 4, line 13) the edge of the first wall part 2 to the second wall part 1 from, in the circumferential direction, an opposite side of the second wall part 1 in relation to the first wall part 2 in such a way that the joined-together portions of the wall parts form a T-shaped joint. The first wall part 2 is essentially perpendicular to the second wall part 1. The first wall part 2 and the second wall part 1 extends both radial and axial of the component. The spacing between walls 3,2,1 are considered gas ducts. The second wall part has essentially radial widening (there is no specific structure claimed with this limitation) and is for transmitting load. Note the further second wall part 3. The two wall parts 3,1 are considered "at least part of two

different blades for guidance of a gas flow/stays. The two second wall parts 3,1 are formed by a single, substantially U-shaped element 4. The blades of Havard et al. are used for turbojet engines and therefore meet the limitations pertaining to.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Farone et al. .

Regarding Claim(s) 10 and 14, Farone et al. teach the limitation except the second edge of the first wall part is also laser-welded to this further second wall part from an, in the circumferential direction, opposite side of the second wall part in relation to the first wall part, but Farone et al. teach the laser-welding the first wall part to a second wall part (35).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have provided the invention of Farone et al. with laser welding the further second wall part and laser welding the ring to the second wall part, in light of the teachings in Farone et al. that is known to use laser welding as an attachment technique in order to securely fasten the walls together.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN C. HONG whose telephone number is 571-272-4529. The examiner can normally be reached on M-F 9:00-17:00.

Application/Control Number:
10/604,760
Art Unit: 3726

Page 6

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID BRYANT can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JOHN C HONG
Primary Examiner
Art Unit 3726

Jh
1/22/08